IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

TOTAL CONTROL SPORTS, INC.,	)	
	)	
Plaintiff,	)	17-cv-09281
	)	
v.	)	
	)	Judge Mary M. Rowland
PRECISION IMPACT,	)	
	)	
Defendant.	)	

MEMORANDUM OPINION AND ORDER

This case is before the Court on claim construction. The parties dispute two claim terms found in both U.S. Patent No. 8,702,542 ("the '542 patent") and U.S. Patent No. 9,186,564 ("the '564 patent"). Defendant Precision Impact also argues that multiple terms within the '564 patent's claims do not meet the definiteness requirements of 35 U.S.C. § 112 (2018). The Court's construction of claim terms and rulings on indefiniteness are set forth in this opinion.[1]

Background & Procedural History

A. Total Control Sports and Precision Impact

Plaintiff Total Control Sports, Inc. (TCS) is an Illinois corporation that develops sports equipment and training methods used to train athletes. First Amended Complaint [25], ¶¶2, 9. TCS owns both the '542 patent and the '564 patent, which are directed towards a weighted ball and a method for training a hitter, respectively. *Id.*,

[1] To reach its decision, the Court reviewed the parties' claim construction briefs, the patents at issue, and patent prosecution histories. In addition, this Court reviewed a transcript of the claim construction hearing held by the prior district judge assigned to this case.

¶10. Defendant Precision Impact (Precision) is a Canadian business that has sold its "Soft Slugs" (Slugs) product in the Northern District of Illinois. Answer to First Amended Complaint [28], ¶3–4.

TCS first filed this suit on December 27, 2017 [1] and then amended its complaint on March 30, 2018 [25] in response to Precision's Motion to Dismiss [20]. In the amended complaint, TCS alleged infringement of the '542 patent (Count I) and infringement of the '564 patent (Count II). TCS alleges that when Precision manufactured, used, sold, provided, and/or offered to sell its Slugs, it directly infringed claim 1 of the '542 patent. *Id.*, ¶24. TCS further alleges that Precision induced its customers, distributors, and end users to infringe through the aforementioned actions. *Id.*, ¶25–26. Similarly, TCS alleges that Precision both directly infringed and induced infringement of claim 1 of the '564 patent through its products and services. *Id.*, ¶35–36.

B. The '542 Patent and its Prosecution History

The '542 patent describes a "weighted ball designed to be hit or struck." U.S. Patent No. 8,702,452, Abstract. The weighted ball is comprised of a hollow inner chamber and an outer shell. *Id.* The outer shell is described as "resilient, flexible, [and] nonburstable." *Id.* Through a filler hole, the inner chamber can be filled with a "weighted filler material." *Id.* The '542 patent recites 16 claims and the terms at issue appear in independent claims 1 and 10.

Before being issued on April 22, 2014, the '542 patent went through multiple rejections. *See, e.g.,* Joint Appendix [44], pp. 78, 117. The examiner, however, did not

raise § 112 indefiniteness objections to the claims at issue. *See id.* The only § 112 rejection that the examiner raised related to the terms describing the hole plug sealant structure. *Id.*, p. 118. The claim terms currently at issue have not changed since the original submission. *Id.*, p. 205.

C. The '564 Patent Overview and Prosecution History

The '564 patent describes a method of training a hitter using a weighted ball. U.S. Patent No. 9,186,564, Abstract. Depending on whether the ball "donuts" and which position it travels in, the hitter can determine if she hit the ball correctly. *Id.* The '564 patent recites three claims. All of the allegedly indefinite terms appear in independent claim 1.

Like the '542 patent, the '564 patent went through multiple rounds of rejection by the patent office. *See, e.g.,* Joint Appendix [44], pp. 307, 354. The patent office rejections were limited to either § 102 novelty rejections or § 103 obviousness rejections. *See id.* Therefore, they provide limited guidance for the claims currently at issue in this case.

D. The Parties' Proposed Claim Constructions

1. Precision Impact's Proposed Claim Construction

The first disputed term is "nonburstable." The term appears in claim 1 of the '542 and '564 patents. In context, it appears as follows:

> A weighted ball for hitting comprising:
> a resilient, flexible, nonburstable shell;
> . . .

U.S. Patent No. 8,702,542, col. 9, lines 9-10. Precision argues that a "nonburstable"

shell is one that cannot be broken open from impact. Precision's Opening Brief [48], p. 8. For intrinsic support, Precision relies on language from the specification that discusses "[h]aving a ball that does not break," the importance of "non-breakability," and a ball that can withstand "repeated striking and hitting . . . without . . . bursting apart." *Id.*, pp. 8–9. For extrinsic support, Precision relies on the definitions of "non" and "burst" stated in the dictionary. *Id.*, p. 9. Accordingly, Precision argues, the dictionary defines "nonburstable" as "not being capable of being broken open or apart." *Id.*

The second disputed term is "said [or 'an'] inside air pressure equals an outside air pressure." The term appears in claims 1 and 10 of the '542 patent and claim 1 of the '564 patent. Demonstrating the terms usage, claim 1 of the '542 patent provides:

> air inside said hollow inner chamber that displaces the remaining space inside said hollow inner chamber such that an inside air pressure equals an outside air pressure;
> . . .

'542 Patent, col. 9, lines 15-17. Precision argues that this term should have its plain and ordinary meaning, which is that the air pressure inside the weighted ball is the same as the air pressure outside the weighted ball. (Dkt. 48 Precision's Br. at p. 10). For support, Precision relies on language in the specification that describes adjusting the air inside the weighted ball until the "outside air pressure and the internal air pressure are equal." *Id.*

Thus, Precision proposes the following constructions:

Claim Term	**Precision Proposed Construction**
"nonburstable"	Not capable of being broken open, apart, or into pieces usually, for example, from impact or from pressure within.
"said [or 'an'] inside air pressure equals an outside air pressure"	Plain and ordinary meaning.

(Dkt. 53, Joint Claim Construction Chart at p. 3).

2. Total Control Sports' Proposed Claim Construction

Regarding the first term, TCS argues that this Court should construe the term to mean that "the outer shell can withstand ordinary contact from a baseball or softball bat without bursting." (Dkt. 50, TCS Resp. Br. at p. 16). In support, TCS points to language in the specification that describes an outer shell material that "is strong enough to withstand multiple batting strikes." *Id.* TCS further contends that in light of the specification, the patentee did not intend to claim a ball that would not burst under any circumstances. *Id.*

TCS argues that this Court should construe the second term to mean that the internal and external air pressures cannot differ such that the weighted ball cannot return to its "normal size when at rest." *Id.*, p. 17. TCS, again, points to language from the specification to support its proposed construction. The specification discusses slight ambient or negative air pressures that allow the weighted ball to keep its shape "without deforming at rest." *Id.* According to TCS, this expressly confirms that the "inside and outside air pressures can be slightly different . . . ." *Id.*

Thus, TCS proposes the following claim constructions:

Claim Term	**TCS Proposed Construction**
"nonburstable"	The outer shell can withstand ordinary contact from a baseball or softball bat without bursting.
"said [or 'an'] inside air pressure equals an outside air pressure"	The inside and outside air pressures on the weighted ball are equal or vary no more than an amount that will allow the weighted ball to return to its normal size when at rest.

(Dkt. 53, Joint Claim Construction Chart at p. 3).

D. The Parties' Contentions

Precision asserts that six terms, all of which describe how the ball will travel, in claim 1 of the '564 patent are indefinite because they do not provide "reasonably certain boundar[ies] for the claim." (Dkt. 48 at p. 3). The challenged terms and parties' contentions for each are summarized below.

1. "said weighted ball traveling a limited distance from said hitter"

Precision argues that the term "limited distance" is not specific enough and provides no guidance on how far the weighted ball should travel. *Id.*, p. 4. The specification, argues Precision, only says that the ball will travel a shorter distance than a regular baseball and provides no objective boundaries. *Id.* Relying on their expert, Mr. Dirk Dembroski, Precision further contends that "no objectively discernable boundary" exists because the ball's travel distance depends on variables like the physical characteristics of the hitter and weight of the ball. *Id.*

TCS responds that a precise distance is not required for the term "limited distance" given the patent's lack of complexity. (Dkt. 50, TCS's Resp. Br. at p. 5). TCS references Figure 4 of the '564 patent, which shows how far a weighted baseball

travels in comparison to a regular baseball. *Id.*, pp. 7-8. The figure depicts a ratio between the two ball types, and TCS contends that a person of ordinary skill in the art would understand the scope of the term after examining Figure 4. *Id.*, p. 8.

2. "lifting up position if hit too low or diving downward position when hit too high"

Similar to its arguments on "limited distance," Precision argues that the terms "too high" and "too low" do not provide an objective boundary on the scope of the claim. (Dkt. 48 at p. 5). Precision also argues that what is "too high" or "too low" will vary based on a hitter's personal preferences or goals. *Id.*

TCS responds that a person of ordinary skill in the art would understand that "too high" or "too low" means that the ball does not travel straight from the bat. (Dkt. 50 at p. 9). TCS relies on Mr. Dembroski using the terms "too high" and "too low" when discussing techniques for training hitters to make its point. *Id.* In reply, Precision argues that Mr. Dembroski's use of the phrases does not change their subjective nature. (Dkt. 52, Precision's Reply Br. at p. 2).

3. "a substantially horizontal plane position"

Here, Precision argues that the specification does not reference a horizontal plane as used by the term and that "substantially horizontal" does not provide guidance of the claim's scope. (Dkt. 48 at p. 6). Precision's expert asserts that it is unclear whether a plane position that deviates 5, 10, or 20 degrees would infringe or fall outside the claim boundaries. *Id.* TCS responds by relying on language in the specification that references a horizontal plane. (Dkt. 50 at p. 10). The specification states:

Because the ball is generally the same size as a regulation ball the hitter

> swings as if hitting a regulation ball, thus practicing proper form. The hitter's swing goes through the hitting zone. The hitting zone is the horizontal plane of the ball, form just before and until just after the ball passes the back edge of the home plate. The hitter begins her swing, makes contact and follows through the hitting zone of the ball as if hitting a regular ball but because of the design and weight the ball does not travel as far.

U.S. Patent No. 9,186,564, col. 5, lines 13-21. TCS maintains that "substantially" is not inherently indefinite given that "hitting a ball is not an exact science." (Dkt. 50 at p. 10).

4. " donuting substantially vertical to ground position"

Precision's primary argument concerns the use of the word "substantially" and the uncertainty it brings to the scope of the claim. (Dkt. 48 at p. 6). In response, TCS argues that numerical precision is not required and that the use of "substantially" does not render a term inherently indefinite. (Dkt. 50 at p. 11).

5. "whereby hitter can actually see said ball deformation"

For this term, Precision again argues that the lack of a numerical metric–measuring quantity of deformation this time–renders the scope of the claim unclear. (Dkt. 48 at p. 7). Precision also asserts it is not clear whether infringement turns on a hitter seeing the deformation or the deformation being capable of being seen. *Id.* If it is the former, says Precision, the term is indefinite because whether a hitter "can actually see deformation is entirely subjective. . . ." *Id.*

TCS responds that the term is not indefinite when read in context. In claim 1 of the '564 patent, the phrase appears as follows:

> Said weighted ball providing instant optical feedback to
> Said hitter by travel position and ball deformation
> Whereby hitter can actually see said ball deformation;

. . .

'564 Patent, col. 10, lines 8-10. TCS argues that infringement occurs when one uses a weighted ball that provides optical feedback that is capable of being seen. (Dkt. 50 at p. 12). TCS further asserts that a numerical metric is unnecessary, and the claim only requires "deformation that a hitter is capable of seeing." *Id.*

6. "donuting in a horizontal position in an out of round deformation when hit in an out of round deformation when hit in an inside out manner with said bat"

First, Precision argues that there is not a standard for hitting a ball in "an inside out manner" and that the specification does not describe the swing in enough detail to provide a clear boundary. (Dkt. 48 at pp. 7-8). Second, Precision argues that "donuting in a horizontal position" does not give the requisite metric by which to determine whether a ball sufficiently "donuts." *Id.*, p. 8.

TCS asserts that the specification—via text and figures—defines hitting in "an inside out manner," or an "inside out swing." TCS goes on to argue that a patentee may act as his own lexicographer should he choose. (Dkt. 50 at p. 14 (citing *Hormone Res. Found, Inc. v. Genentech, Inc.*, 904 F.2d 1558, 1563 (Fed. Cir. 1990)). TCS defends the "donuting in a horizontal position" term by pointing out language and figures from the specification that describe what it means for the ball to donut. *Id.*, pp. 15–16.

Discussion

A. Applicable Legal Standards

1. Claim Construction

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*) (citation omitted). Claim construction is a matter of law for the Court to determine. *Markman v. Westview Instruments, Inc.,* 517 U.S. 370, 391 (1996); *Marine Polymer Techs., Inc. v. HemCon, Inc.*, 672 F.3d 1350, 1357-58 (Fed. Cir. 2012). A party cannot transform claim construction into a factual matter through expert opinions. *See Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1376 (Fed. Cir. 2017) ("The internal coherence and context assessment of the patent, and whether it conveys claim meaning with reasonable certainty, are questions of law.") (internal citation and quotations omitted).

Claim construction analysis begins with the words of the claims themselves, giving those words their ordinary and customary meaning, which is the "meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips*, 415 F.3d at 1312–13; *see also InterDigital Commc'ns, LLC v. Int'l Trade Commc'n*, 690 F.3d 1318, 1324 (Fed. Cir. 2012). A court interpreting claims "should look first to the intrinsic evidence of record, i.e., the patent itself, including the claims, the specification and, if in evidence, the prosecution history." *Wenger Manufacturing, Inc. v. Coating Machinery Systems, Inc.*, 239 F.3d 1225, 1232 (Fed. Cir. 2001)(quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). "Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in

which the disputed term appears, but in the context of the entire patent, including the specification." *Phillips*, 415 F.3d at 1315.

"[A] district court's construction of a patent claim, like a district court's interpretation of a written instrument, often requires the judge only to examine and to construe the document's words without requiring the judge to resolve any underlying factual disputes. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 135 S. Ct. 831, 840-41 (2015). "In some cases, however, the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." *Id.* Before considering extrinsic evidence to construe a disputed claim, courts must first examine the intrinsic evidence. *Phillips*, 415 F.3d at 1317-19. If a term is ambiguous based on the intrinsic record, reliance on extrinsic evidence is then appropriate. *See Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 711 F.3d 1348, 1360 (Fed. Cir. 2013) (citing *Phillips*, 415 F.3d at 1317).

As the Federal Circuit recently explained:

> extrinsic evidence, encompassing all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises, can also be used to determine a term's meaning. But, extrinsic evidence is less significant than the intrinsic record in the construction process. And so, the Court should consider extrinsic evidence only when intrinsic evidence cannot be used to resolve ambiguities in the claim language.

Geospatial Tech. Assocs., LLC v. United States, 2019 U.S. Claims LEXIS 175, at *24-25 (Fed. Cl. Mar. 7, 2019) (internal citations and quotations omitted).

2. Definiteness

A patent's specification must end with "one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor . . . regards as the invention." 35 U.S.C. § 112(b). This definiteness requirement must balance "the inherent limitations of language" and the need for a patent to be "precise enough to afford clear notice of what is claimed." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909 (2014). A claim is indefinite if it "fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377 (Fed. Cir. 2015) (quoting *Nautilus*, 572 U.S. at 901). Invalidity on the basis of indefiniteness must be proven by clear and convincing evidence. *Id.* (citing *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 94 (2011)). General principles of claim construction apply to indefiniteness allegations. *Id.* (citing *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010)).

If a claim uses a "word of degree," (e.g. substantially) the court must determine if the patent provides "some standard for measuring that degree." *Id.* at 1378 (quoting *Enzo Biochem*, 599 F.3d at 1332). The "word of degree" must provide "enough certainty to one of skill in the art when read in the context of the invention." *Id.* (citing *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014)). While neither absolute or mathematical precision are required, "[t]he claims, when read in light of the specification and the prosecution history, must provide objective boundaries for those of skill in the art." *Interval Licensing*, 766 F.3d at 1370-71 (citing

Nautilus, 572 U.S. at 910). Ultimately, "the degree of precision necessary for adequate claims is a function of the nature of the subject matter." *Biosig Instruments*, 783 F.3d at 1382 (citations omitted).

B. Analysis of the Disputed Claim Terms

1. Construction of "Nonburstable"

To construe a claim term, the Court must begin with the "words of the claims themselves. . . ." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Within claim 1 of the '542 and '564 patents, "nonburstable" is used as follows:

> 1. A weighted ball for hitting comprising:
> a resilient, flexible, nonburstable outer shell;

See, e.g., '542 Patent, col. 9, lines 9–10. The Court must give the term its ordinary meaning as understood by a person of ordinary skill in the art reading the term in the context of the entire patent. *Phillips*, 415 F.3d at 1313. Precision argues that the term should be given its plain and ordinary meaning, i.e. incapable of bursting. (Dkt. 53, Joint Claim Construction Br. at p. 3). TCS argues that the Court should construe it to mean that the shell "can withstand ordinary contact from a baseball or softball bat without bursting." *Id.*

The specification provides context for the "nonburstable" term in at least two locations. Because identical language is found in both patents, the Court will use the '542 patent's specification for this analysis. First, the specification provides:

> The present invention uses a flexible, pliable PVC, preferably non-phthalate material, as the external skin or outer shell. Its non-breakability is important for many reasons. First, this material is **strong enough to withstand multiple batting strikes thus giving the ball longevity**.
> This longevity is important because the balls are somewhat expensive to

> manufacture and of course these costs ultimately pass through to the consumer. **Having a ball that does not break benefits the consumer because she does not have to continually purchase replacement balls.**

'542 patent, col. 6, lines 5-13 (emphasis added).

The highlighted language shows that the patentee did not intend to claim a weighted ball that was incapable of bursting under any circumstances, as Precision argues. The material is meant to withstand "multiple batting strikes," not infinite batting strikes. *See id.* Additionally, the discussion of the ball's longevity implies that it lasts for a long time, not forever. *See id.* Finally, the language above does not say that a consumer will never have to buy a replacement ball, only that she will not have to continually buy replacements. *See id.* Precision relies on the presence of the words "non-breakability" and "a ball that does not break" to give "nonburstable" the most literal definition possible (i.e. incapable of bursting). (Dkt. 48 at p. 9). This definition, however, ignores the context set by the specification.

In further support of TCS's proposed construction, the specification discusses how the outer shell, along with other features, "allows for repeated striking and hitting [of] the ball without the ball bursting apart." '542 Patent, col. 8, lines 57–60. Here, the patent again discusses the ball's ability to withstand multiple strikes, as opposed to infinite strikes, without bursting. By contrast, Precision underscores only the part of the language that refers to the ball not bursting apart without considering the remaining context of the specification. (Dkt. 48 at p. 9).

Precision relies on the dictionary definitions of the terms "non" and "burst" to construe "nonburstable." *Id.* But reliance on extrinsic evidence is not needed when

"intrinsic evidence alone will resolve any ambiguity. . . ." *Vitronics*, 90 F.3d at 1583. In the light of the specification, the Court finds that a person of ordinary skill in the art would not read "nonburstable" as literally incapable of being broken apart by any means.

Next is the determination of what kind of strikes or hits the weighted ball is meant to withstand. TCS proposes that the weighted ball be able to "withstand ordinary contact from a baseball or softball bat without bursting." (Dkt. 53, Joint Claim Construct Chart at p. 3). Although both patents primarily discuss baseball and softball, neither explicitly limits the application to only a baseball or softball. Further, it is improper to read a limitation from the written description into the claims. *See Phillips*, 415 F.3d at 1320.

After giving a description of how a hitter can repeatedly hit the weighted ball without the need to purchase a new one, the specification goes on to say that this description can be used with "any other ball that may be struck with a bat or club." '542 Patent, col. 8, lines 61–67. Then, the specification states, "the specific features described are intended to be representative only." *Id.* at col. 9, lines 2–4. The specification described the preferred embodiment and not the only embodiment. This language supports a construction of "nonburstable" that requires the shell to withstand ordinary contact from either a bat or a club. Although the Court may read a limit from the specification into a claim if that limitation is clearly indicated, that clarity is not present here. *See Enzo Biochem Inc.*, 599 F.3d at 1342. While the specification discusses "multiple batting strikes," it also considers any balls that can

be hit with a bat or club, and claims the weighted ball as a golf ball in dependent claim 9 of the '542 patent.

In light of the above discussion, the Court accepts TCS's proposed construction with the modification that the outer shell be able to withstand ordinary contact from a bat or club.

2. Construction of "said [or 'an'] inside air pressure equals an outside air pressure"

Like the term above, the Court construes this term in light of the specification. Though they argue for different constructions, both parties rely on the same language to support of their respective arguments. Precision argues that the Court should give the term its plain and ordinary meaning. (Dkt. 53 Joint Claim Construction Chart at p. 3). TCS believes the Court should construe the term to allow for a variance in pressure as long as the ball retains its shape. *Id.* Again both patents use identical language when referring to the disputed term. The specification states:

> In the present invention, any additional air is removed after filling through the self-sealing plug, like a basketball air filler, such that the outside air pressure and the internal air pressure are equal. Ambient or slightly negative pressure levels of air are slight and allow the shell strength to return the ball to its spherical size without deforming the ball when at rest.

'542 Patent, col. 7, lines 29-35.

To Precision the specification does not allow for any variance between the internal and external pressures. (Dkt. 48 at p 10). As TCS argues, however, the "specification expressly notes that the inside and outside air pressures can be slightly different . . . ." (Dkt. 50 at p. 17). Despite Precision's arguments to the contrary, that variance is limited to an amount that allows the weighted ball to retain its shape at rest. *See* '542

Patent, col. 7, lines 29-35. In other words, the variance goes beyond the claimed limit when the ball becomes deformed and cannot retain its spherical shape at rest.

Therefore, the Court accepts TCS's proposed construction for this term.

3. Indefiniteness Challenges

In light of the specification, the Court finds that the disputed claim elements of the '564 patent, challenged on indefiniteness grounds, "inform those skilled in the art with reasonable certainty about the scope of the invention." *Biosig Instruments*, 783 F.3d at 1382. Therefore, the Court finds that these claim elements are definite and not invalid. For many of the indefiniteness challenges, Precision offered testimony from their expert, Mr. Dirk Dembroski. *See, generally,* Dkt. 48. Because general principles of claim construction apply to definiteness challenges, however, extrinsic evidence is not required if the intrinsic evidence alone can resolve the issue. *See Biosig Instruments*, 783 F.3d at 1377. Here, the Court finds that the intrinsic evidence is sufficient.

First, Precision challenges the "limited distance" claim element. Precision argues that the specification provides no guidance on the numerical distance that "limited distance" represents. (Dkt. 48 at p. 7). The specification, however, displays a graphical representation of how a standard baseball or softball performs against a weighted baseball or softball. '564 Patent, fig. 4. According to the graph, a standard baseball will go eight times further than a weighted baseball and a standard softball will go ten times further than a weighted softball. *See id.* Although the final numbers may vary depending on who hits the ball, the ratio will remain the same. That ratio

informs a person of ordinary skill in the art how far the weighted ball should travel compared to a standard ball.

Second, Precision argues that the "too high" and "too low" claim elements do not provide objective boundaries and will vary based on a hitter's preferences and goals. (Dkt. 48 at p. 5). As TCS argues, however, the boundaries of these terms are better understood in full context:

> said weighted ball providing instant optical feedback to
> said hitter by **travel position** and ball deformation
> whereby hitter can actually see said ball deformation;
>
> said weighted ball travels by leaving said bat in a **substantially horizontal plane position when hit correctly**
> and in a generally round formation;
>
> said weighted ball travels by donuting substantially vertical
> to ground position in an out of round deformation
> when hit incorrectly;
> lifting up position if hit too low or diving downward position when hit too high

'564 Patent, col. 10, lines 8–18 (emphasis added). The claim elements refer to what happens to the ball, with respect to its position, when it is hit incorrectly. *See id.* When hit correctly, the ball leaves the bat in a "substantially horizontal plane." *Id.* When hit incorrectly, the ball will either lift up or dive downward such that it is no longer in a "substantially horizontal plane." A person having skill in the art would know whether a ball appeared to be going straight. This is based on what a normal human eye perceives, and thus "provides an objective baseline through which to interpret the claims." *See Sonix Tech. Co.*, 844 F.3d at 1378 (finding that the term "visually negligible," which referenced graphics negligible to the human eye, was definite because it relied on an objective baseline).

Precision relies on *Abdou v. Alphatec*, 2014 WL 6611422 at *1, *10 (S.D. Cal. Nov. 19, 2014) to support its position. *Abdou* involved a patent geared towards treating spinal injuries. *Id.* at *8. To treat the injury, the patent discussed mounting a device relative to some point between two vertebrae. The patent further discussed two other devices that attached to the first device and to a second area along the spine. *Id.* The problem stemmed from the fact that the locations of the insertion and attachment points were necessary for the device to function properly, and the patent did not identify where the locations should be. *Id.* Here, however, the "too high" and "too low" elements are in relation to a travel direction that is "substantially horizontal." When the ball is not traveling straight, it will either be "too high" or "too low" as judged by a normal human eye.

Third, Precision takes issue with the "substantially horizontal" claim element just discussed above. Given that "substantially" is a "word of degree," the Court must determine if the '564 patent "provides some standard for measuring that degree." *Biosig Instruments*, 783 F.3d at 1378 (quoting *Enzo Biochem*, 599 F.3d at 1332) (internal quotes omitted). Similar to the terms "too high" and "too low", the boundaries of the "substantially horizontal" claim element are clearer in context. Again, the context is "a weighted ball providing instant optical feedback to [a] hitter by travel position. . . ." '564 Patent, col. 10, lines 8–18. "Substantially horizontal" refers to the travel position the ball will take when hit correctly. The normal human eye can perceive when an object travels "substantially horizontal," and thus a person having ordinary skill has an objective baseline to interpret the claims. *See Sonix Tech.*

Co., at 1378.

Precision relies on *Berkheimer v. HP, Inc.*, 881 F.3d 1360, 1364 (Fed. Cir. 2017) to support its indefiniteness challenges to "substantially horizontal." (Dkt. 48 at p. 4). *Berkheimer* addressed a patent for a digital archiving system that eliminated redundant storage of text and graphics such that there was "minimal redundancy." 881 F.3d at 1364. The patent provided no guidance as to what level of redundancy would be considered minimal. *Id.* That problem is not present here, however, because the perceptions of the normal human eye provide a baseline for what appears straight.

Next, the Court finds that the following three challenged terms are definite for similar reasons discussed above. Precision similarly argues that the claim elements "donuting substantially vertical," "whereby hitter can see said ball deformation," and "donuting in a horizontal position" do not provide numerical guidance or measurements for a person of ordinary skill in the art. (Dkt. 48 at 6-8). The specification describes "donuting," which is also the deformation that is referenced, as the process that happens when the spin on the ball causes it to "flatten out and look like a donut due to the filler material." '564 Patent, col. 2, lines 32–37. Like the claim elements addressed above, this donuting–whether horizontal or vertical–is bounded by what the normal human eye can perceive. It thus follows that the claim elements turn on what is capable of being seen and not what is actually seen by a particular hitter at the time she is batting.

Finally, Precision argues that the claim element "hit in an inside out manner" is

indefinite because there is no industry standard that defines an "inside out swing." (Dkt. 48 at pp. 7-8). This argument does not get far, however, because it is well-established that an inventor may act as his own lexicographer. *See Phillips*, 415 F.3d at 1316. Here, the patentee did exactly that. The specification defines the swing as follows:

> Additionally, the ball reacts differently when struck with an inside out or open swing. This swing is the type where the hitter's hands travel through the hitting Zone ahead of the barrel of the bat and the ball is driven to the opposing direction or field. In this scenario, the ball will donut horizontal to the ground, thus again letting the hitter know that she has hit the ball incorrectly.

'564 Patent, col. 2, lines 37–43; *see also id.*, figs. 8a-8c. Thus, the Court finds that the claim is definite.

Conclusion

For the reasons explained above, the Court finds that Precision's proposed constructions do not properly consider the context of the specification. In contrast, TCS's proposed constructions are consistent with the claim language, specification and prosecution history of the patent in suit. Accordingly, the Court adopts TCS's proposed construction with a small modification. The Court also rejects Precision's indefiniteness challenges.

The disputed claim terms are construed as follows:

Disputed Claim Term	Court's Construction
"nonburstable"	The outer shell can withstand ordinary contact from a bat or club without bursting.
"said [or 'an'] inside air pressure equals an outside air pressure"	The inside and outside air pressures on the weighted ball are equal or vary no more

	than an amount that will allow the weighted ball to return to its normal size when at rest.

Dated: December 2, 2019

ENTERED:

Mary M Rowland

MARY M. ROWLAND
United States District Judge